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10/723,086	11/25/2003	David William Trepess	450110-04833	7893

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EXAMINER
DAYE, CHELCIE L

ART UNIT	PAPER NUMBER
2161	

DATE MAILED: 11/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/723,086	TREPESS ET AL.
	Examiner	Art Unit	
	Chelcie Daye	2161	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>06 October 2006</u>.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-10,12,13,15,17-28 and 33</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-10,12,13,15,17-28, and 33</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   This action is issued in response to applicant's amendment filed October 6, 2006.

2.   Claims 1-10,12,13,15,17-28, and 33 are presented. Claim 33 is added and

claims 11,14,16, and 29-32 are cancelled.

3.   Claims 1-10,12,13,15,17-28, and 33 are pending.

4.   Applicant's arguments filed October 6, 2006, have been fully considered but they

are not persuasive.

Claim Rejections - 35 USC § 102

5.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6.   **Claims 1-2,4-5,7-8,10,12-13,15,17-18,23,26-28, and 33 are rejected under 35**

U.S.C. 102(e) as being anticipated by Saffer (US Patent No. 6,990,238) issued

January 24, 2006.

        Regarding Claims 1,23, and 33, Saffer discloses an information retrieval

apparatus comprising:

a mapping processor operable to receive data representative of a map of

information items from a set of information items identified in a search (column

19, lines 4-38, Saffer), the map providing the identified information items with

respect to positions in an array in accordance with a mutual similarity of the

information items, similar information items mapping to similar positions in the

array (Fig.18; column 17, lines 36-57, Saffer), and to process the map data to

form a hierarchical clustering of information items (columns 8-9, lines 53-67 and

1-4, respectively, Saffer) providing a first clustering level of information items and

at least one other clustering level of information items for clusters of information

items within the first level clusters (column 10, lines 34-40, Saffer),

a display processor operable in combination with a graphical user

interface (Fig.18, Saffer) to display a representation of at least some of the

positions of the array correspond to identified information items as an n-

dimensional display of display points within a display area of a graphical display

(columns 18-19, lines 64-67 and 1-8, Saffer),

wherein the display processor is operable to generate data representative

of an indication which when displayed on the graphical user interface provides a

user, when viewing a first cluster in one of the hierarchical levels of a relative

direction within the n-dimensional space of the location of another cluster within

the hierarchical level (column 29, lines 21-33, Saffer), and the graphical user

interface (Fig.16, Saffer) is operable to display the indication of the relative

direction of the other cluster within the display area of the graphical display

(column 29, lines 21-33, Saffer), and the data representing the number of

information items within the cluster is displayable with respect to the indication

(column 13, lines 5-14, Saffer).

Regarding Claim 2, Saffer discloses an apparatus wherein the information

items include a plurality of characterizing information features, the characterizing

information features of each information item being used to form a feature vector

for each information item (columns 9-10, lines 62-67 and 1-15, respectively,

Saffer), the feature vector being used to form the map data by mapping the

information item onto a position within the array (column 19, lines 31-38, Saffer).

Regarding Claim 4, Saffer discloses an apparatus wherein the

characterizing information feature associated with each first level cluster and the

other characterizing information feature associated with each cluster within the

other clustering level of information items are formed from a most common

characterizing information feature present in the information items associated

with each cluster (column 12, lines 60-67, Saffer).

Regarding Claim 5, Saffer discloses an apparatus wherein the clusters of

information items within one of the lower level clusters are associated with one

another, whereas the other clusters of the first level are additional clusters of

information items with respect to the information items within the lower level cluster (column 2, lines 23-39, Saffer).

Regarding Claim 7, Saffer discloses an apparatus wherein the information items comprise textual information, the characterizing information features being words (columns 15-16, lines 60-67 and 1-2, respectively, Saffer), and the feature vector for an information item is representative of a set of frequencies of occurrence, within that information item, of each of a group of words (column 11, lines 23-51, Saffer).

Regarding Claim 8, Saffer discloses an apparatus wherein the information items include textual information, the characterizing information features being words (columns 15-16, lines 60-67 and 1-2, respectively, Saffer), the positions within the array being mapped by mutual similarity of at least a part of the textual information (column 17, lines 36-57, Saffer).

Regarding Claim 10, Saffer discloses an apparatus wherein the information items are pre-processed for mapping (columns 10-11, lines 64-67 and 1-2, respectively, Saffer) by excluding words occurring within the textual information having less than a threshold frequency amongst the set of information items (column 30, lines 24-32, Saffer).

Regarding Claims 12,18,27 and 28, Saffer discloses an apparatus wherein the display area includes at least two areas (Fig.16, Saffer), one area providing an n-dimensional representation of the first hierarchical level of clusters and the other area providing an n-dimensional representation of the other hierarchical level of clusters, where n is an integer (column 21, lines 14-28 and column 22, lines 10-27, Saffer).

Regarding Claim 13, Saffer discloses an apparatus comprising

search processor for carrying out a word-related search of the information items (column 18, lines 64-67, Saffer);

the search processor and the graphical user interface being arranged to co-operate so that only those display points corresponding to identified information items are displayed (column 19, lines 4-38, Saffer).

Regarding Claim 15, Saffer discloses an apparatus wherein the display processor is operable to generate data representative of the number of information items within the other cluster (column 13, lines 5-14, Saffer), the number of information items being associated with the indication of the relative direction in the n-dimensional space of the other cluster with respect to the first cluster (column 29, lines 21-33, Saffer).

Regarding Claim 17, Saffer discloses an apparatus further comprising a

user control for selecting information items or clusters of information items within

the n-dimensional space using a user controlled pointer (Fig.19; column 21, lines

40-54, Saffer), wherein the number of information items are display with respect

to the indication of relative direction, in response to the pointer being positioned

over the indication (column 30, lines 50-62, Saffer).

Regarding Claim 26, Saffer discloses the method further comprising

displaying a representation of at least some of the positions of the array as

an n-dimensional display array of display points within a display area of a

graphical display (columns 18-19, lines 64-67 and 1-8, Saffer).

Claim Rejections - 35 USC § 103

7.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

8.   **Claims 3,6,9,19,20,24, and 25, are rejected under 35 U.S.C. 103(a) as being**

unpatentable over Saffer (US Patent No. 6,990,238) filed September 30, 1999, as

applied to claims 1,2,4,5,7,8,10-18,23 and 26-32, in view of Doerre (US Patent No.

6,446,061) filed June 30, 1999.

Regarding Claims 3 and 24, Saffer discloses all of the claimed subject matter, as stated above. However, Saffer is silent with respect to providing the first clustering level of information items with a characterizing information feature associated with each of the first level clusters of information items and to provide a characterizing information feature for the clusters of information items within the first level clusters at the other hierarchical level. On the other hand, Doerre discloses providing the first clustering level of information items with a characterizing information feature associated with each of the first level clusters of information items and to provide a characterizing information feature for the clusters of information items within the first level clusters at the other hierarchical level (column 17, lines 24-49, Doerre). Saffer and Doerre, are analogous art because they are from the same field of endeavor of generating a content classifier of a multitude of electronic documents. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate Doerre's teachings into the Saffer system. A skilled artisan would have been motivated to combine as suggested by Doerre at column 4, lines 22-28, in order to be able to improve the ability and flexibility of the content classifier, so as to cope with the increasing number of documents to be analyzed in a reasonable amount of time.

Regarding Claim 6, the combination of Saffer in view of Doerre, disclose an apparatus wherein the characterizing information item associated with each

cluster is the most common word of the textual information associated with each of the information items within each cluster (column 17, lines 14-30, Saffer).

Regarding Claim 9, the combination of Saffer in view of Doerre, disclose an apparatus wherein the information items are pre-processed for mapping (columns 10-11, lines 64-67 and 1-2, respectively, Saffer) by excluding words occurring within the textual information having more than a threshold frequency amongst the set of information items (column 13, lines 43-54, Doerre).

Regarding Claim 19, the combination of Saffer in view of Doerre, disclose a video acquisition and processing apparatus comprising an information retrieval apparatus having a mapping processor operable to receive data representative of a map of information items from a set of information items identified in a search (column 19, lines 4-38, Saffer), the map providing the identified information items with respect to positions in an array in accordance with a mutual similarity of the information items, similar information items mapping to similar positions in the array (Fig.18; column 17, lines 36-57, Saffer), and to process the map data to form a hierarchical clustering of information items (columns 8-9, lines 53-67 and 1-4, respectively, Saffer) providing a first clustering level of information items and at least one other clustering level of information items for clusters of information items within the first level clusters (column 10, lines 34-40, Saffer),

a display processor operable in combination with a graphical user interface (Fig.18, Saffer) to display a representation of at least some of the positions of the array correspond to identified information items as an n-dimensional display array of display points within a display area of a graphical display (columns 18-19, lines 64-67 and 1-8, Saffer), wherein the display processor is operable to generate data representative of an indication which when displayed on the graphical user interface provides a user, when viewing a first cluster in one of the hierarchical levels of a relative direction within the n-dimensional space of the location of another cluster within the hierarchical level (column 29, lines 21-33, Saffer), and the graphical user interface (Fig.16, Saffer) is operable to display the indication of the relative direction of the other cluster within the display area of the graphical display (column 29, lines 21-33, Saffer), and the data representing the number of information items within the cluster is displayable with respect to the indication (column 13, lines 5-14, Saffer), the information items including video data with the textual information (column 1, lines 44-49, Doerre).

Regarding Claim 20, the combination of Saffer in view of Doerre, disclose the video acquisition and processing apparatus further comprising

a repository containing the information items (column 8, lines 40-48, Doerre); and

a data communications network for connecting the repository with the

information retrieval apparatus (column 5, lines 38-46, Saffer).

Regarding Claim 25, the combination of Saffer in view of Doerre, disclose

the apparatus wherein the information items include a plurality of characterizing

information features, the characterizing information features of each information

item being used to form a feature vector for each information item (columns 9-10,

lines 62-67 and 1-15, respectively, Saffer), the feature vector being used to form

the map data by mapping the information item onto a position within the array

(column 19, lines 31-38, Saffer).

9.   **Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable**

over Saffer (US Patent No. 6,990,238) filed September 30, 1999, in view of Doerre

(US Patent No. 6,446,061) filed June 30, 1999, and further in view of Branscomb

(US Patent No. 5,977,992) filed September 5, 1997.

Regarding Claim 21, the combination of Saffer in view of Doerre, disclose

all of the claimed subject matter, as stated above. However, the Saffer in view of

Doerre, are silent with respect the information items include a representative key

stamp providing a representative image from the information item. On the other

hand, Branscomb discloses the information items include a representative key

stamp providing a representative image from the information item (column 5,

lines 18-32, Branscomb). The combination of Saffer in view of Doerre, and further in view of Branscomb are analogous art because they are from the same field of endeavor of generating and storing video data. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate Branscomb's teachings into the Saffer in view of Doerre system. A skilled artisan would have been motivated to combine as suggested by Branscomb at column 13, lines 55-63, in order to organize and assemble images in a relational graphic space via a content image, which provides a powerful interactive visual display. As a result, the system is therefore capable of alleviating the amount of time needed as well as decreasing the tediousness of the process.

Regarding Claim 22, the combination of Saffer in view of Doerre, and further in view of Branscomb, disclose the video acquisition and processing apparatus wherein the characterizing information feature associated with each first level cluster and the other characterizing information feature associated with each cluster within the other clustering level of information items are formed from a most common characterizing information feature present in the information items associated with each cluster (column 6, lines 48-52, Doerre) and the common characterizing information feature associated with a cluster includes a representative key stamp, which is common to the cluster (column 13, lines 34-44, Branscomb).

Response to Arguments

Applicant argues, in regards to newly amended claim 1, Saffer does not disclose "a display processor in combination with a graphical user interface to generate data representing an indication which when displayed on the graphical user interface provides a user when viewing a first cluster in one of the hierarchical levels of a relative direction within the n-dimensional space of the location of another cluster within the hierarchical level (column 29, lines 21-33, Saffer)" and also "a graphical user interface which displays an indication of the relative direction of the other cluster within the display area of the graphical display (column 29, lines 21-33, Saffer) and the data representing the number of information items within the cluster is displayable with respect to the indication (column 13, lines 5-14, Saffer)". Specifically, applicant believes Saffer does not provide a graphical indication to a user of a location of another cluster of information items within a same hierarchical level.

Examiner respectfully disagrees. As stated in the action above, Saffer discloses at column 29, lines 21-33; wherein an indication is provided using multiple visualizations, which corresponds to providing a graphical indication to a user. Further, the indication is provided to point out that a cluster, which contains ten (10) records has a correlation of 0.8 and another cluster of ten (10) records has a correlation of 0.9; which when averaged is a correlation of 0.8. It is known within the art that a positive correlation (i.e. 0.8) means that clusters tend to move up and down together, therefore

located on the same hierarchical level. Saffer discloses at column 18, lines 27-62; for more details about the location of other clusters within the hierarchical level.

Applicant argues, Doerre does not remedy the deficiency discussed above, and a prima facie case of obviousness has not been presented.

Examiner respectfully disagrees. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Therefore, applicants argument that Doerre does not remedy the deficiency discussed above is invalid, because as explained above Saffer discloses the limitation argued and Doerre was not relied upon for those particular limitations. Also, in response to applicant's argument that a prima facie case of obviousness has not being established, examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the obviousness was fully provided within the office action dated 06/06/2006.

Applicant argues, Branscomb does not remedy the deficiency discussed above,

and a prima facie case of obviousness has not been presented.

Examiner respectfully disagrees. See the explanation for Doerre as stated above.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action.

Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant

is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

Points of Contact

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Chelcie Daye whose telephone number is 571-272-

3891. The examiner can normally be reached on M-F, 7:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Jeffrey Gaffin can be reached on 571-272-4146. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

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Chelcie Daye
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November 16, 2006
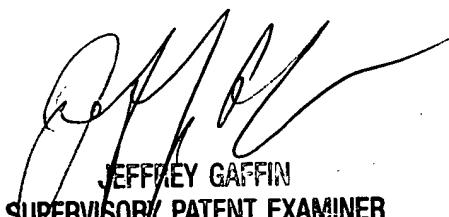
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